| Ref<br># | Hits | Search Query   | DBs                             | Default<br>Operator | Plurals | Time Stamp       |
|----------|------|--|---------------------------------|---------------------|---------|------------------|
| L1       | 1325 | (phase adj change) with CELL   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 17:21 |
| L2       | 141  | (phase adj change) with cell and tellurium   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 15:37 |
| L3       | . 19 | (phase adj change) with cell with tellurium  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 15:46 |
| L4       | 0    | (phase adj change chalcogen\$3) with tellurium with (eletrode)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 15:46 |
| L5       | 41   | ((phase adj change chalcogen\$3)<br>with tellurium) with (electrode)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:00 |
| L6       | 396  | ((phase adj change chalcogen\$3)<br>with ("Te" tellurium)) with (cell<br>memory)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:01 |
| L7       | 298  | ((phase adj change chalcogen\$3)<br>near5 ("Te" tellurium)) with (cell<br>memory)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:01 |
| L8       | 4    | ((phase adj change chalcogen\$3) near5 ("Te" tellurium)) with (cell memory) with (trench hole via recess damascene)                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:03 |
| L9       | 20   | ((phase adj change chalcogen\$3)<br>near5 ("Te" tellurium)) with (trench<br>hole via recess damascene)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:03 |
| L10      | 4760 | (phase near3 change\$3 chalcogenide chalcogen ovonic) with (recess trench hole via groove opening pore damascene)                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:06 |
| L11      | 219  | (phase near3 change\$3 chalcogenide chalcogen ovonic) with (recess trench hole via groove opening pore damascene) with ("Te" tellurium)                | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR .                | ON      | 2006/03/29 16:09 |
| L12      | 3    | (phase near3 change\$3 chalcogenide chalcogen ovonic) with (recess trench hole via groove opening pore damascene) with ("Te" tellurium) with electrode | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 16:09 |
| L13      | 219  | 11 and (phase near3 change\$3 chalcogenide chalcogen ovonic) with ("Te" tellurium)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR                  | ON      | 2006/03/29 17:26 |

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|------------|------|---|---------------------------------|----|------|------------------|
| L14        | 180  | (phase adj change) with pore  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON . | 2006/03/29 17:21 |
| L15        | 3    | (phase adj change) with pore with ("Te" tellurium)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 17:23 |
| L16        | 200  | (phase near3 change\$3 chalcogenide chalcogen ovonic) with ("Te" tellurium) with (trench via hole groove damascene recess depression) | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 17:35 |
| L17        | 3915 | (phase near3 change\$3<br>chalcogenide chalcogen ovonic)<br>with (trench via hole groove<br>damascene recess depression)              | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 17:35 |
| L18        | 661  | 17 and (phase near3 change\$3 chalcogenide chalcogen ovonic) with ("Te" tellurium)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 17:36 |
| L19        | 386  | 17 and (phase near3 change\$3 chalcogenide chalcogen ovonic) near5("Te" tellurium)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 17:36 |
| L20        | 179  | 19 and (phase near3 change\$3 chalcogenide chalcogen ovonic "Te" tellurium) with (conduct\$3 elelctrode)                              | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:00 |
| L21        | 2    | 10/787121   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:00 |
| L22        | 1    | 21 and "Te"   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:05 |
| L23        | 1    | "6921912"   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:05 |
| L24        | 3    | 09/740256   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:25 |
| L25        | 2    | 09/803176   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 18:25 |
| <b>S32</b> | 185  | (phase adj change) with capacitor   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 15:36 |
| S33        | 1482 | (phase adj change) with memory  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2004/11/24 14:16 |

|     |       |   | _                               |    |    |                  |
|-----|-------|---|---------------------------------|----|----|------------------|
| S35 | 1661  | S32 or S33  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:16 |
| S36 | 1661  | S35 and (phase adj change capacitor memory)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:23 |
| S37 | 416   | "22" and ((phase adj change) with electrode)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:19 |
| S38 | 182   | S36 and ((phase adj change) with electrode)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:19 |
| S39 | 121   | S38 and ((recess trench hole via groove opening) with electrode)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:21 |
| S40 | 131   | S38 and ((recess trench hole via groove opening pore damascene) with electrode)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2005/09/09 13:23 |
| S41 | 2081  | 438/259,270.ccls.   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:22 |
| S42 | 0     | S41 and S36   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:22 |
| S43 | 592   | S41 and (phase adj change capacitor memory)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:23 |
| S44 | 246   | S43 and ((recess trench hole via groove opening pore damascene) with electrode)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:58 |
| S45 | 2     | S43 and (phase adj change)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 14:59 |
| S46 | 0     | S41 and ((phase adj change) with (memory capaitor material layer))  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 15:00 |
| S47 | 10493 | ((phase adj change) with (memory capaitor material layer))  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 15:01 |
| S48 | 40    | ((phase adj change) with (memory capaitor material layer)) with (electrode near5 (recess trench pore damascene hole opening groove aperture)) | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2004/11/24 15:03 |
| S49 | 2161  | (phase adj change) with (capacitor memory)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON | 2005/09/09 13:18 |

| S50 | 3110   | (phase near3 change) with (capacitor memory)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON . | 2005/09/09 13:19 |
|-----|--------|---|---------------------------------|----|------|------------------|
| S51 | 3869   | (phase near3 change\$3<br>chalcogenide ovonic) with<br>(capacitor memory)   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:24 |
| S52 | 433445 | (recess trench hole via groove opening pore damascene) with (electrode plug pillar column)                        | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:28 |
| S53 | 4213   | (phase near3 change\$3 chalcogenide ovonic) with (recess trench hole via groove opening pore damascene)           | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2006/03/29 16:05 |
| S54 | 1960   | (phase near3 change\$3<br>chalcogenide ovonic) near5 (recess<br>trench hole via groove opening pore<br>damascene) | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:26 |
| S55 | 424    | S51 and (phase near3 change\$3 chalcogenide ovonic) near5 (recess trench hole via groove opening pore damascene)  | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:28 |
| S56 | 279    | S55 and S52   | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:27 |
| S57 | 279    | S56 and (phase near3 change\$3 chalcogenide ovonic recess trench hole via groove opening pore damascene)          | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:28 |
| S58 | 279    | S57 and (recess trench hole via groove opening pore damascene electrode plug pillar column)                       | US-PGPUB;<br>USPAT;<br>EPO; JPO | OR | ON   | 2005/09/09 13:28 |